

Please rewrite claim 49 as follows:

A2

1 49. (Amended Once) Polarization interferometric apparatus, said apparatus
2 comprising interferometer means for receiving at least two beams having orthogonal
3 states of polarization and providing first and second interferometer legs, separating
4 said two beams for travel along said first and second interferometer legs,
5 respectively, and generating exit beams containing information about the respective
6 differences in the optical paths each beam experienced in traveling said first and
7 second interferometer legs, said first and second interferometer legs having optical
8 paths structured and arranged such that at least one of them has a variable physical
9 length, the optical path length difference between said first and second interferometer
10 legs varying in accordance with the difference between the respective physical
11 lengths of their optical paths, said interferometer means further including a
12 polarization preserving optical system located in at least one of said first and second
13 interferometer legs and structured and arranged to deviate plane polarized beams
14 through preselected angles while maintaining their linear polarization as they travel
15 along said at least one of said first and second interferometer legs and a plurality of
16 differently tilted retardation elements [opposing surfaces at least some of which are
17 tilted with respect to others] to reduce the effects of ghost beams on exit beams.

A3

Please rewrite claim 50 as follows:

1 50. (Amended Once) The polarization interferometric apparatus of claim 49
2 wherein said plurality of differently tilted retardation elements comprise a pair of
3 oppositely tilted quarter-wave plates [at least one of said first and second
4 interferometer legs includes a polarization preserving optical system].

REMARKS

Under the Office Action of March 3, 2000, claims 1 through 54 were subject to examination. Of those, claims 1-30, 33, 35-54, and 49-52 were rejected under either the provisions of 35 USC § 102 or 35 USC § 103 and/or 35 USC § 112 as set forth more particularly below. Claims 31, 32, 34, 45-48, 53 and 54 were objected to but